

QUESTIONS TO MITA FROM SENATOR STAMAS

- 1. What role did the Flint water crisis play in prompting MITA to contract with Public Sector Consultants (PSC) to assess the level of water infrastructure investment needed to bring systems and facilities up to current standards?**

A: None. The Michigan Infrastructure & Transportation Association (MITA) is the merger of two past associations, the Michigan Road Builders Association (MRBA) and the Associated Underground Contractors (AUC). AUC, and now MITA, has advocated for proper investment into Michigan's underground infrastructure for decades. MITA's decision to analyze the overall needs for proper funding in our state's underground infrastructure has been in the works for much longer than the Flint water crisis, and our organization had already reached out to PSC prior to any public knowledge of what is occurring in Flint.

- 2. How did you estimate a total investment need of between \$731 million and \$1.01 billion on an average annual basis until 2030?**

A: PSC analyzed data from the U.S. Census Bureau to determine how much investment Michigan communities are spending. Each year, the bureau collects information from local and state governments through its *Annual Survey of State and Local Finances*. In addition, PSC confirmed this information from data collected by the Municipal Advisory Council of Michigan (MAC), which maintains records of outstanding bond debt held by Michigan communities. From there, PSC then collected data from the Environmental Protection Agency (EPA) based on two surveys they conduct every four years that estimate both drinking water investment needs and wastewater and stormwater investment needs. Comparing what is being spent by communities and what estimates for needs are, PSC concluded that an annual investment of \$731 million to \$1.01 billion is needed to maintain Michigan's clean drinking water needs.

- 3. Based on these estimates, you indicate Michigan is underinvesting in its drinking water infrastructure by anywhere from \$284 to \$563 million each year? What qualifiers can you identify that would affect this estimate?**

A: There are many reports by industry analysts that suggest both EPA surveys provide conservative estimates because they only seek to quantify infrastructure investments that would be eligible to receive financing through state revolving loan programs. Attempts have been made by the American Water Works Association (AWWA), the Congressional Budget Office (CBO), the EPA, and the Water Infrastructure Network (WIN) to quantify differences between the results of the surveys and communities' true long-term investment needs. Estimates vary due to factors; the most noticeable is because several communities are not included in the

survey, as many of them cannot meet the required rigorous documentation and because many use a shorter planning horizon than the 20-year survey period from the EPA. In addition, approximately 25% of homes in Michigan rely on individual well systems to provide their drinking water and investments into those systems are not considered in the surveys.

4. Your estimate of the “underfunding gap” is based on data developed before the Flint drinking water crisis. Can anything be learned from the Flint water crisis that could materially alter those estimates?

A: Absolutely. The biggest thing that can be learned from the Flint water crisis in regards to what communities may need to invest in their underground infrastructure is that it is really unknown. Documentation of location, condition, type and size or even who owns different facilities is extremely old or not kept up to date in many communities throughout our state, which can expose serious and costly problems that may have been left ignored for decades.

5. How much of Michigan’s Clean Water and Drinking Water Revolving Loan Funds have provided over \$ 6.59 billion (in 2015 dollars) to supply state residents with clean drinking water and manage the state’s wastewater, was allocated to drinking water?

A: IF data exists, the PSC report did not analyze that.

6. Between 2009 and 2013, Michigan communities borrowed over \$4.56 billion (an average of \$913 million each year) for water and sewer infrastructure. How much of this amount was attributable to drinking water projects?

A: IF data exists, the PSC report did not analyze that.

7. Are you aware of any computer modelling for infrastructure planning practices that governmental units could use to guard against major crises?

A: MITA is not aware of any computer modeling for underground infrastructure, but one might exist. We believe that this opens up an opportunity for an asset management council on our underground infrastructure to form statewide. Michigan’s Transportation Asset Management Council, formed in the late 1990’s, is viewed as one of the best monitoring and rating systems for our roads and bridges in the entire nation.

8. What do you think are the appropriate roles for state government and local units of government in providing funding for necessary infrastructure projects?

A: Underground infrastructure investment has primarily been local communities’ responsibility. Unfortunately, we have seen for decades that local communities (for

a variety of reasons) do not have the resources to maintain their underground water and sewer systems. Clearly, more state funding is needed to avoid situations that are occurring all over our state, demonstrating underinvestment and deteriorating underground infrastructure. State dollars can be used as an incentive for support of local initiatives.

9. Are you aware of any federal revenues that could be pursued toward this end?

A: MITA recently participated in its annual Federal Fly-in and the Flint case has generated a tremendous amount of discussion of the federal government's role in funding our underground water and sewers. Several bills have been introduced to help communities like Flint replace and invest in their underground systems, but the vast majority of them are one-time fixes. There have been ongoing federal dollars that have flowed through the state for Clean Drinking Water (CDW) and Clean Water (CW) "sewers" from EPA appropriations, however these amounts have been dwindling over the past decade.

10. What is your view of the recently approved appropriation to establish a state infrastructure fund?

A: This is a great first step. Like our transportation system, we at MITA believe that there needs to be an annual revenue source from the state to maintain our underground infrastructure. We commend Governor Snyder for proposing (and the Legislature for following through on) a state infrastructure fund and the initial investment that is being debated in this budget cycle. However, more needs to be done. Some dedicated revenue for that fund is needed for a variety of reasons, but at the very least so that the state can react immediately when a crisis like the one in Flint occurs.

11. How would you estimate the cost/time relationship for the conclusion that delaying capital improvements will increase O&M monies?

A: Just like roads and bridges, the longer you wait to fix underground infrastructure, the more it deteriorates, and the more it will cost over time. We all heard, during the road funding debate the analogies to maintaining a roof on a house or changing the oil on a vehicle, and they all apply here. The longer communities wait on general maintenance of their underground water and sewers, the greater potential exists for complete replacement and reconstruction of their facilities, which have very large price tags attached.

12. In evaluating the infrastructure investment practices of local units of government in the state how would you describe the best practice(s) currently employed?

A: Those communities that assess their underground systems on a regular basis and consider improvements and investments prior to a system failing have a leg up on those communities that don't. Our underground systems are out of sight and out of mind for many citizens in Michigan. If communities develop a way to showcase the failing system underground, the public may be more willing to invest additional funds. A coordinated approach is also important. If you are going to rebuild a road, consider the underground infrastructure at the same time and vice-versa.

13. What is your view of bill transparency that would inform water customers of which portion(s) of their bill goes toward infrastructure and O&M?

A: As mentioned in the previous answer, if citizens are shown the problems facing their underground systems and are also shown what investments are being made and where, they are more likely to accept that their water and sewer bills are an investment into those systems, rather than wasteful spending that they may believe is occurring.

14. Please describe your understanding of how municipalities determine safe drinking water pricing for their customers?

A: N/A

15. Are you aware of any computer modelling that would put a finer point on how fast the state's fleet of water treatment plants are approaching their expected lifespan?

A: MITA is not aware of any system in place to analyze and monitor that.

16. Does the EPA's failure to update the Lead Copper Rule as required by federal law cause you any concern regarding their survey methodology?

A: Yes, there are many shortcomings from the survey methodology that the EPA uses, which is why there is a range of estimated investment need in our state found in the PSC report. This points back to a lot of the discussions regarding the fact that the state and individual communities just don't fully understand the overall need that exists to properly maintain their underground systems.

17. What other methodologies (besides the EPA) did you evaluate to quantify differences between the survey results and communities' true long-term investment needs?

A: The American Water Works Association (AWWA), the Congressional Budget Office (CBO), and the Water Infrastructure Network (WIN) all have different ways of analyzing needs. The largest shortfall from the EPA reports are the lack of consideration for private systems and their current level of need. The EPA reports only analyze those infrastructure investments that would be eligible to receive

financing through state revolving loan programs. In addition, approximately 25% of homes in Michigan rely on individual well systems to provide their drinking water and investments into those systems are not considered in the surveys.

18. Is there any reason to think the 2002 EPA adjustment factor you used in developing drinking water estimates may need updating?

A: PSC believes that for drinking water, the 2002 methodology and current methodology are very similar in the EPA reporting and are likely not in need of adjustment. Obviously, findings can be different as facilities continue to get older and deteriorate, however, the collection of data is very thorough and accurate for analyzing our needs. That being said, the surveys are conducted differently now than they were in 2002 when determining wastewater and stormwater investment needs. PSC believes that those adjustments should be considered before determining what that overall need may be.

19. How would you describe the reason for the many differences between drinking water survey results and communities' long-term investment needs?

A: Estimates range because of several factors, the most noticeable is because several communities are not included in the survey as many communities cannot meet the required rigorous documentation and because many communities use a shorter planning horizon than the 20-year survey period from the EPA. And again, approximately 25% of homes in Michigan rely on individual well systems to provide their drinking water and investments into those systems are not considered in the surveys.

20. In which categories has Michigan been strongest and/or weakest compared to other states over the past 5 modelling periods of the EPA's *Drinking Water Infrastructure Needs Survey (DWINS)* (summarized below)?

A: The PSC report does not analyze what other states are doing to improve their underground water and sewers. However, the 2009 Report Card for Michigan's Infrastructure conducted by the American Society of Civil Engineers rates Michigan's drinking water at a grade 'D'.

Survey Period	DWINS Estimate (low) 2015 dollars, millions	Adjusted Estimate (high) 2015 dollars, millions
Adjustment Factor	Inflation only	~1.387
2011–2030	\$14,612.62	\$20,267.87
2007–2026	\$13,590.76	\$18,850.54
2003–2022	\$14,627.28	\$20,288.20
1999–2018	\$9,695.47	\$13,447.73
1994–2014	\$6,927.26	\$9,608.19